Subject: One PI Folded Horn
Posted by GarMan on Tue, 17 Feb 2004 17:59:35 GMT
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I spend over an hour each day walking with my dog, so I have a lot of time to think up wacky ideas.What our your thoughts of a Folded Horn based on the OnePi speaker. Same as the 10Pi, but scaled down for the OnePi. It would be a neat little project, with final unit standing 36"x18"x20". Gar.

Subject: Re: One PI Folded Horn
Posted by Wayne Parham on Tue, 17 Feb 2004 18:43:45 GMT
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It would be a cute little box, but cutoff would be kinda high. Might work well when used with a sub.

Subject: Re: One PI Folded Horn
Posted by GarMan on Tue, 17 Feb 2004 19:48:52 GMT
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Shoot! Didn't think of that.Correct me if I'm wrong. Using the ratios provided in your PiAlign document, the horn mouth would be 18"x24", giving a total area of 432 sqr in.Area = ((speed sound/freq)^2)/(4*pi)However, because the horn sits on the floor, effective area doubles to 864 sqr inch, giving me a cutoff of 130Hz.Does this mean that by putting the OnePi into a folded horn, it will end up having worst bass response? Only frequencies above 130Hz will be increased by the 3dB that the horn provides?Gar.

Subject: Re: One PI Folded Horn
Posted by Wayne Parham on Tue, 17 Feb 2004 20:06:38 GMT
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You would expect the horn to increase output of the system above 100Hz, but not below 100Hz. You would still have output from the driver, but it would be as a direct radiator so it would be at a reduced level.

Subject: Bummer (nt)
Posted by GarMan on Tue, 17 Feb 2004 20:59:03 GMT
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nt

Subject: Small midbass horn
Posted by Wayne Parham on Tue, 17 Feb 2004 21:22:13 GMT
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You could probably build a longer horn with a more narrow profile and get deeper bass response in a relatively small cabinet. Check Mike's little 40Hz basshorn. Using a horn with tight folds, you'll lose some upper frequency response but the added length will gain you some on the bottom end.